

Lymphogranuloma Venereum (*Chlamydia trachomatis*)

February 2003

1) THE DISEASE AND ITS EPIDEMIOLOGY

A. Etiologic Agent

Lymphogranuloma venereum (LGV) is caused by *Chlamydia trachomatis*, immunotypes (serotypes) L-1, L-2, and L-3.

B. Clinical Description and Laboratory Diagnosis

A sexually acquired chlamydial infection beginning with a small, painless, evanescent erosion, papule, nodule or herpetiform lesion on the penis or vulva, which is often unnoticed. Regional lymph nodes undergo suppuration followed by extension of the inflammatory process to the adjacent tissues. Fever, chills, headache, joint pains and anorexia are usually present. In the male, inguinal buboes are seen that may become adherent to the skin, fluctuate and result in sinus formation. In the female, inguinal nodes are less frequently affected and involvement is mainly of the pelvic nodes with extension to the rectum and rectovaginal septum, resulting in proctitis, stricture of the rectum, and fistulae. Proctitis may result from rectal intercourse, and LGV is a fairly common cause of severe proctitis in homosexual men. Elephantiasis of the genitalia may occur in either gender. The disease is often long, and the disability great but generally not fatal. Generalized sepsis with arthritis and meningitis is a rare occurrence.

Laboratory diagnosis is based on demonstration of chlamydial organisms by immunofluorescence, enzyme linked immunoassay, DNA probe, polymerase chain reaction, microimmunofluorescence serologic test or complement fixation test.

C. Vectors and Reservoirs

Humans.

D. Modes of Transmission

Direct contact with open lesions of infected people, usually during sexual intercourse.

E. Incubation Period

Variable, with a range of 3-30 days for a primary lesion; if a buboe is the first manifestation, 10-30 days, to several months.

F. Period of Communicability or Infectious Period

Variable, from weeks to years, during presence of active lesions.

G. Epidemiology

Worldwide, especially in tropical and subtropical areas, most commonly in Southeast Asia, Africa, Central America and the Caribbean. LGV is significantly more common in men than in women. Men are more likely to present with inguinal lymphadenopathy in the second stage of the disease. Women and homosexual men who engage in receptive anal intercourse are more likely to present with complications of late disease. The disease in temperate climates is seen predominantly in male homosexuals. No cases of LGV were reported to the NJDHSS in the last 5 years.

2) REPORTING CRITERIA AND LABORATORY TESTING SERVICES

A. New Jersey Department of Health and Senior Services (NJDHSS) Case Definition

CASE CLASSIFICATION

A. CONFIRMED

A clinically compatible case, **AND**

- Isolation of *C. trachomatis*, serotype L1, L2 or L3 from clinical specimen, **OR**
- Demonstration by immunofluorescence of inclusion bodies in leukocytes of an inguinal lymph node (buboe) aspirate, **OR**
- Positive microimmunofluorescent serologic test for a lymphogranuloma venereum strain of *C. trachomatis*.

B. PROBABLE

A clinically compatible case with one or more tender fluctuant inguinal lymph nodes or characteristic proctogenital lesions with supportive laboratory findings of a single *C. trachomatis* complement fixation titer of >64.

C. POSSIBLE

Not used.

Note: See Section 3 B&C below for information on how to report.

B. Laboratory Testing Services Available

Laboratory testing for LGV is not available on site at the Public Health and Environmental Laboratories (PHEL). At present, the PHEL will forward specimens to the Centers for Disease Control and Prevention (CDC) for testing. For additional information on submitting samples, contact the PHEL at 609.292.7368.

3) DISEASE REPORTING AND CASE INVESTIGATION

A. Purpose of Surveillance and Reporting

- To identify the prevalence of LGV in New Jersey.
- To identify where LGV occurs in New Jersey.
- To recognize areas in New Jersey where LGV incidence has increased or decreased.
- To focus preventive education.

B. Laboratory and Healthcare Provider Reporting Requirements

The New Jersey Administrative Code (N.J.A.C. 8:57-1.8) stipulates that laboratories and the health care providers report all cases of LGV **to the NJDHSS Sexually Transmitted Diseases Program** by telephone 609.588.7526, confidential fax 609.588.7462 or in writing using the STD-11 form. The STD-11 form can be obtained from the Sexually Transmitted Diseases Program at phone 609.588.7526.

C. Health Officer's Reporting and Follow-up Responsibilities

1. Reporting Requirements

The New Jersey Administrative Code (N.J.A.C. 8:57-1.6) stipulates that cases of LGV, as defined by the criteria in Section 2A, be reported directly to the NJDHSS using a STD-11 form. The form may be mailed or faxed 609.588.7462 to the STD Program. A local health officer who is notified of the existence of a case of LGV shall forward the case report to the NJDHSS Sexually Transmitted Diseases Program.

The mailing address is:

NJDHSS
Division of Epidemiology, Environmental and Occupational Health
Sexually Transmitted Diseases Program
P.O.Box 369
Trenton, NJ 08625-0369

2. Case Investigation

Institution of disease control measures is an integral part of the case investigation. It is the local health officer's responsibility to understand, and, if necessary, institute the control guidelines listed below in Section 4, "Controlling Further Spread."

4) CONTROLLING FURTHER SPREAD

A. Isolation and Quarantine Requirements

Minimum Period of Isolation of Patient

Patients should refrain from sexual contact until lesions are healed.

Minimum Period of Quarantine of Contacts

No restrictions.

B. Protection of Contacts of a Case

Examine and treat recent sexual partners of confirmed active cases.

C. Managing Special Situations

None.

D. Preventive Measures

Personal Preventive Measures/Education

In general, the following preventive measures are applicable to all sexually transmitted diseases (STD):

- The patient should be strongly advised to avoid sexual contact while symptoms (lesions) are present as they are infectious.
- The patient should be strongly encouraged to ensure that their recent sexual partners be tested and treated.
- The patient should be strongly advised to avoid prostitutes, wear condoms and avoid having multiple sexual partners.

ADDITIONAL INFORMATION

There is currently no formal CDC surveillance definition for lymphogranuloma venereum. CDC case definitions are used by state departments of health and CDC to maintain uniform standards for national reporting. For reporting a case to the NJDHSS, always refer to the criteria in Section 2 A of this chapter.

REFERENCES

CDC, Sexually Transmitted Diseases Treatment Guidelines 2002, MMWR 2002, 51:RR-6

Chin, J., ed., Control of Communicable Diseases Manual, 17th Edition. Washington, DC, American Public Health Association, 2000.

Lorek, J., Acker, S., Lymphogranuloma Venereum, eMedicine Journal November 2001; Volume 2, Number 11.

Holmes, K., Sparling, P., et al, Sexually Transmitted Diseases, 3rd Edition, New York, NY, McGraw-Hill, 1999.

Mandel, G., Bennett, J., Dolin, R., Principles and Practices of Infectious Diseases, Churchill Livingstone, 2000.